

On page 6 under "Reference Numerals in Drawings" please replace description for reference number 32 with the following amended description:

32 - Light Control-Controlled Panel (LCP)

Map
2-5-07

On page 7 under "Detailed Description of the Invention" please delete the paragraph starting with "The Visibility Enhancing Method (VEM) is using" and ending with "the same substrate as the TF array"

Map
2-5-07

On page 7 under "Detailed Description of the Invention" please delete the paragraph starting with "Driving voltage is applied" and ending with "controls the pixel transparency"

Map
2-5-07

On page 7 under "Detailed Description of the Invention" please delete the paragraph starting with "In addition, LCP control 34" and ending with "controlling the LCP enhancing capability"

Map
2-5-07

On page 7 under "Detailed Description of the Invention" please insert the following paragraph:

The Method for Enhancing Visibility offers automatic image enhancement to common optics in-use today at various visibility conditions. By using devices such as the Light Controlled Panel (LCP), the Method for Enhancing Visibility provides the ability to control separately some or all observed element, while keeping the other elements almost intact. In the Method for Enhancing Visibility, a Light Controlled Panel (LCP) 32 is used to generate an active pixilated panel (Fig 3).

The Light Controlled Panel (LCP) process the observed image elements and an optical array collimates the image elements and optically directs them to the LCP's focal plane. The image is transferred through the LCP (creating a sub-image) and via the complementary collimating optical array towards the observer eyes or to another optical system. Typically the optical power (magnification) of the system is one. The same collimating optics used for the complementary optics can be used to compensate for geometric distortion.

The LCP consists of pixilated array with a Thin Film (TF) light sensitive device for each pixel. Each pixel's transparency is controlled by the amount of light that shines on it. The panel can be made of transparency-controlled material 28, comprised of transparent pixel electrodes 27, controlled by embedded TFT Light Sensitive Elements (LSE). The transparency of all the elements (Contrast) can be controlled by the magnitude of the voltage that drives the LCP. The TF active element is attached to each Pixel (structure element) to precisely control it. The row and column electrodes used to control the pixels can be formed on the same substrate as the TF array. The DC driving signal is usually applied to the row (X) electrode of the pixel, and the contrast signal is applied to its column (Y).

On page 7 please amend the following sentence:

A verity of technologies, such as the following, may be used to implement transmissivethe LCP:

On page 7 please replace the last paragraph with the following amended paragraph:

The LCP 32 can be used in various pixel shapes, resolution and size to provide the desired optical system and required image quality. The driving voltage applied to the LCP controls its enhancement level and can also completely switch off the enhancement option of the LCP. The magnitude of LCP's driving voltage can control the visibility level or even completely switch off the enhancement option and return to the regular behavior of an un-enhanced optical device. Typically, when no power is applied to the LCP, the transparency of the panel is set to "Normally Open" state, in order to set the system to a neutral position (maximum transparency) as a fallback.

May 15/07
On page 7 please replace the ~~second~~ paragraph starting with "For some applications a reflective LCP " till the end of the last paragraph on page 9, ending with "Tempe, AZ USA, can be used." with the following amended paragraph:

For some applications a reflective LCP may be used. In these applications the reflected light is controlled by the pixels by its associated LSE. For such panels a modified